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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/782,394

02/18/2004

Paul J. Husted

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EXAMINER

BURD, KEVIN MICHAEL

ART UNIT

PAPER NUMBER

2611

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/782,394	Applicant(s) HUSTED ET AL.	
	Examiner Kevin M. Burd	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-24, 51-56, 60 and 62-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17, 51-56, 60 and 62-79 is/are allowed.
- 6) ☒ Claim(s) 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/16/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

1. This office action, in response to the request for continued examination and the amendment filed 1/25/2008, is a final office action.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/25/2008 has been entered.

3. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

4. Applicant's arguments regarding claims 1-17, 51-56, 60 and 62-79 have been fully considered and are persuasive. The rejections of these claims have been withdrawn.

5. Applicant's arguments filed 1/25/2008 regarding claims 19-24 have been fully considered but they are not persuasive. Applicant states Husted does not disclose a selective abort sequence. The examiner disagrees. Husted discloses detecting interference in an input signal. When an adjacent interferer is present, interference is present in band for the desired signal, so that in band power measurements when no desired signal is present can get a quick spike, looking like an increase in the in band power. The lowest 28 of 32 samples are used so the temporary spike is nulled out. Once a signal of interest is present, all samples are used. Strong and weak detection will then be used (paragraph 0054). If a signal is found, the detection process is complete and the signal will be feed to downstream elements for processing of the reception sequence (paragraph 0031). This is the activating a signal reception sequence. If a signal is not found, the detection process will stop for this portion of the signal. The signal will not be sent to down stream elements for processing of the reception sequence. Instead, the detection process will be repeated on the next portion

of the signal (paragraph 0031). Therefore, when the signal is an interference signal, the signal detection of a signal of interest is aborted and new processes are conducted. This information was stated in the advisory action mailed 1/11/2008 as well as the final office action mailed 9/25/2007.

For this reason and the reasons stated in the previous office action, the rejections of the claims are maintained and stated below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 19-21 and 23 are rejected under 35 U.S.C. 102(a) as being anticipated by Husted et al (US 2002/0183027).

Regarding claims 19, 21 and 23, Husted discloses a method of using a system for disregarding co-channel signals in a communication network. The receiver searches for and receives a signal (figure 2). The receiver, shown in figure 2, processes the signal. An in-band signal is detected and differentiated from high power out of band signals that overlap the target band (paragraph 0006). An abort sequence is disclosed that will disable signal detection upon the determination that the signal is an interference signal (paragraphs 0006 and 0031). Husted further discloses detecting a new signal and to disable weak signal detection (paragraphs 0031 and 0066).

Regarding claim 20, Husted discloses a method of using a system for disregarding co-channel signals in a communication network. The receiver searches for and receives a signal (figure 2). The receiver, shown in figure 2, processes the signal. An in-band signal is detected and differentiated from high power out of band signals that overlap the target band (paragraph 0006). An abort sequence is disclosed that will disable signal detection upon the determination that the signal is an interference signal (paragraphs 0006 and 0031). Husted further discloses calculating in-band power using a limited number of samples. If this power level exceeds a value, the remaining samples are used. The in-band power measurement when no desired signal is present can get a quick spike for a few samples and will immediately decrease when the remaining samples are used (paragraph 0054).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Husted et al (US 2002/0183027) in view of Haverinen et al (US 2004/0208151).

Regarding claims 22 and 24, Husted discloses the method of using a system for disregarding co-channel signals in a communication network as stated above. The system operates using IEEE 802.11 standard (paragraph 0014). Husted does not

disclose aborting the signal reception sequence if the in-band signal includes one or more of an address or an identification signal. Haverinen discloses transmitting packets according to IEEE 802.11 standard (paragraph 0046). The packets contain a destination MAC address field and are verified. If the identifier is incorrect, the access point preferably discards the data packet (paragraph 0046). This allows improper or undesirable signals to be disregarded, saving processing time and power. For these reasons, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Haverinen into the method and system of Husted.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cornelius et al (US 5,491,721) discloses a method and apparatus of controlling a modem. The in-band power of a received signal is monitored in the in-band signal detector circuit 111 in figure 1. In a no activity state, no received signal is present. Therefore, the in-band power of the received signal line is zero. When the presence of an in-band signal is detected, power up of the modem begins and communication is established. A positive power change is detected and an enable restart circuit restarts the modem (column 4, lines 27-67). While a modem is powered up, the received signal line is monitored. When a received signal is not detected for a period of time, the modem powers down. The in-band power will have dropped from level present in the signal to zero. A negative power change is detected and an "enable power drop circuit" is enabled to power down the modem (column 4, lines 27-67).

Cornelius discloses the analog modems described reduces the amount of wasted power consumed (column 1, lines 12-20).

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Burd whose telephone number is (571) 272-3008. The examiner can normally be reached on Monday - Friday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Payne can be reached on (571) 272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin M. Burd/
Primary Examiner, Art Unit 2611
4/1/2008